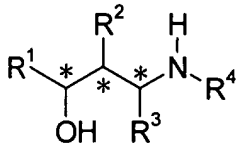
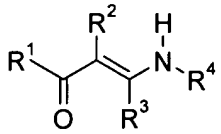
Amendments to the Claims

1. (Currently amended) A process for producing an optically active amino alcohol represented by the following formula (2)



(2)

wherein R^1 is a hydrocarbon group, a substituted hydrocarbon group, an aromatic heterocyclic group, a substituted aromatic heterocyclic group, an aliphatic heterocyclic group or a substituted aliphatic heterocyclic group; R^2 and R^3 each independently is hydrogen atom, a hydrocarbon group, a substituted hydrocarbon group, an acyl group, an acyloxy group, an alkyloxycarbonyl group, an aralkyloxycarbonyl group, an aryloxycarbonyl group, an aromatic heterocyclic group, a substituted aromatic heterocyclic group, an aliphatic heterocyclic group or a substituted aliphatic heterocyclic group; R^4 is hydrogen atom or a protective group; two or more of R^1, R^2, R^3 and R^4 may be bonded to each other to form a ring; and * is asymmetric carbon, provided that when R^2 or R^3 is hydrogen atom, the carbon atom to which R^2 or R^3 is bonded is not an asymmetric carbon, or a salt thereof, which comprises subjecting a compound represented by the following formula (1) or a salt thereof to an asymmetric hydrogenation reaction in the presence of an asymmetric metal complex:



(1)

wherein R^1 is a hydrocarbon group, a substituted hydrocarbon group, an aromatic heterocyclic group, a substituted aromatic heterocyclic group, an aliphatic heterocyclic group or a substituted aliphatic heterocyclic group; R^2 and R^3 each independently is hydrogen atom, a hydrocarbon group, a substituted hydrocarbon group, an acyl group, an acyloxy group, an alkyloxycarbonyl group, an aralkyloxycarbonyl group, an

aryloxycarbonyl group, an aromatic heterocyclic group, a substituted aromatic heterocyclic group, an aliphatic heterocyclic group or a substituted aliphatic heterocyclic group; R^4 is hydrogen atom or a protective group; two or more of R^1, R^2, R^3 and R^4 may be bonded to each other to form a ring; and the double bond between the carbon atoms to which R^2 and R^3 are attached is cis or trans or a mixture thereof.

2. (Cancelled)

3. (Original) The process according to claim 1, wherein the asymmetric hydrogenation reaction is carried out in the presence of a base.

4. (Original) The process according to claim 3, wherein the amount of the base used is 0.15 to 10 equivalents relative to the compound represented by the formula (1).

5. (New) The process according to claim 1, wherein R^1 is a hydrocarbon group, a substituted hydrocarbon group, an aromatic heterocyclic group or a substituted aromatic heterocyclic group, each of R^2 and R^3 is hydrogen atom and R^4 is a protective group.

6. (New) The process according to claim 1, wherein R^1 is an aromatic heterocyclic group, a substituted aromatic heterocyclic group, an aryl group or a substituted aryl group, each of R^2 and R^3 is hydrogen atom and R^4 is a hydrocarbon group.

7. (New) The process according to claim 1, wherein R^1 is an aromatic heterocyclic group or an aryl group, each of R^2 and R^3 is hydrogen atom and R^4 is an alkyl group.

8. (New) The process according to claim 1, wherein R^1 is a thienyl group or a phenyl group, each of R^2 and R^3 is hydrogen atom and R^4 is a methyl group.

9. (New) The process according to claim 1, wherein the compound of formula (2) is (1S)-3-(methylamino)-1-(2-thienyl)propan-1-ol or (S)-3-(N-methylamino)-1-phenyl-1-propanol and the compound of formula (1) is 3-methylamino-1-thiophen-2-yl-propanone or 3-methylamino-1-phenylpropanone.

10. (New) The process according to claim 1, wherein the asymmetric metal complex is $RuCl_2$[(R)-binap][R,R)-dpen],$RuCl_2$[(R)-binap][(R)-daipen], $RuCl_2$[(R)-Tol-binap][(R,R)-dpen], $RuCl_2$[(R)-Tol-binap][(R)-daipen], $RuCl_2$[(R)-DM-binap][R,R)-dpen] or $RuCl_2$[(R)-DM-binap][(R)-daipen], in which binap means 2,2'-bis)diphenylphosphino)-1,1'-binaphthyl, Tol-binap means 2,2'-bis(di-p-tolylphosphino)-1,1'-binaphthyl, DM-binap means 2,2'-bis[bis(3,5-dimethylphenyl)phosphino]-1,1'-binaphthyl, dpen means 1,2-diphenyl-ethylenediamine and daipen means 1,1-di(4-anisyl)-2-isopropyl-1,2-ethylenediamine.

11. (New) The process according to any one of claims 1 or 3 to 10, wherein the asymmetric metal complex is $RuCl_2$[(R)-DM-binap][(R,R)-daipen].